

## **REMARKS**

Claims 1-4 are pending in the application. Claims 1-4 have been amended in order to more particularly point out, and distinctly claim the subject matter to which the applicant regards as his invention. The applicant respectfully submits that no new matter has been added. It is believed that this Amendment is fully responsive to the Office Action dated **November 18, 2005**.

### **Claim Rejections under 35 USC §103**

**Claims 1 and 2 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hashimoto (U.S. 5,847,907).**

The present invention relates to a method of evaluating the positioning accuracy of a magnetic head tester that tests the performance of a magnetic head mounted in a magnetic disc drive. In this method of evaluating the positioning accuracy of a magnetic head tester, tests are conducted to measure the performance of a magnetic head (14) by carrying out read and write operations on a magnetic medium (12) using the magnetic head (14). A number of GAP profiles are acquired by repeatedly carrying out a GAPS test that measures a GAP offset amount for the magnetic head (14). The GAP offset measures the offset between the write head and read head. A GAP offset fluctuation amount is calculated from the acquired GAP profiles, and the calculation result is set as an index for evaluating the position reproducibility of the magnetic head.

Hashimoto describes a recording/reproduction apparatus equipped with an integrated head. FIG. 6 of Hashimoto shows a slippage (offset) between the geometric center line (29) passing through the inductive write element gap (5) and the geometric center line (30) of the MR read

element 10. This offset is defined as a geometric difference (31) between the write and read modes different from the magnetic difference (26) in FIG. 5.

Hashimoto discloses a method of minimizing a GAP offset amount when a magnetic head is moved in an inner part and an outer part of a recording medium. On the other hand, the present invention related to the method of evaluating positioning accuracy of the magnetic head tester. Namely, the object of Hashimoto is quite different from that of the present invention.

The object of the present invention is to evaluate positioning accuracy of the magnetic head tester. Since magnetic recording density of recording media are highly raised and highly accurate magnetic heads are required, the performance of magnetic head testers themselves must be evaluated. However, the cited references have no relation to evaluating positioning accuracy of the magnetic tester. Thus, the cited references do not teach or suggest the technical idea of the present invention at all.

Claim 1 has been amended to further describe the GAP offset fluctuation amount. This is described on page 9 in paragraph 44 of the specification which states that the "GAP offset fluctuation amount = GAP offset maximum value (A1) - GAP offset minimum value (A2)". Claim 2 has been amended to further describe the "write core width fluctuation amount = write core width maximum value (B1) - write core width minimum value (B2)". This is described on page 9, paragraph 49 of the specification.

With these amendments claims 1 and 2 patentably distinguish over the prior art. Therefore, withdrawal of the rejection of Claims 1 and 2 under 35 U.S.C. §103(a) as being unpatentable over Hashimoto (U.S. 5,847,907) is respectfully requested.

**Claims 3 and 4 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hashimoto in view of Chong et al. (U.S. 6,839,193).**

Chong et al. describes an apparatus for determining read-to-write head offset of a disk drive. Two methods for determining a MR offset are provided in Chong et al. The first method provides a profile of the signal strength of the read back AGC data field which is obtained by micro-jogging the head from an initial point being a position, that is -50% of the track's width from the track centerline, to a final point being a position, that is +50% of the track's width from the track centerline, and sensing the signal strength.

An object of Chong is to solve displacement of a read-position and a write-position, which are caused by a GAP offset of a magnetic head. Chong does not achieve the object of the present invention.

The object of the present invention is to evaluate positioning accuracy of the magnetic head tester. Since magnetic recording density of recording media are highly raised and highly accurate magnetic heads are required, the performance of magnetic head testers themselves must be evaluated. However, the cited references have no relation to evaluating positioning accuracy of the magnetic

tester. Thus, the cited references do not teach or suggest the technical idea of the present invention at all.

Claim 3 has been amended to further describe the 50% position sensitivity. This is described on page 11 in paragraph 56 which states that the “50% position sensitivity = (track position Y2 – track position Y1) / (output level X2 – output level X1)”. Claim 4 has been amended to further describe the “50% position fluctuation amount = (maximum output level – minimum output level) × 50% position sensitivity”. This is described on page 11, paragraph 59 of the specification.

With these amendments claims 3 and 4 patentably distinguish over the prior art. Therefore, withdrawal of the rejection of Claims 3 and 4 under 35 U.S.C. §103(a) as being unpatentable over Hashimoto in view of Chong et al. (U.S. 6,839,193) is respectfully requested.

### **Conclusion**

In view of the aforementioned amendments and accompanying remarks, claims 1-4, as amended, are believed to be patentable and in condition for allowance, which action, at an early date, is respectfully requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the applicant's undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, the applicant respectfully petitions for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

ARMSTRONG, KRATZ, QUINTOS,  
HANSON & BROOKS, LLP



George N. Stevens  
Attorney for Applicant  
Reg. No. 36,938

GNS/nrp  
Atty. Docket No. **040524**  
Suite 1000  
1725 K Street, N.W.  
Washington, D.C. 20006  
(202) 659-2930



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Enclosures: Petition for Extension of Time

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